therium equiceps, *A. longicriste* and *A. praestans*, from the John Day Beds of Oregon, the horizon of Miohippus. The separation of Miohippus from Anchitherium is proposed by Prof. Scott, on the relative size of the conules of the molars, on the form of the external face of their external wall, and on the separation or confluence of the posterior transverse crest with the latter. The first two characters do not appear to me to be of generic value, while the third is probably a valid one. On this basis the John Day *Anchitheria equiceps*, *brachylophum*, and *longicriste* must be referred to Miohippus, while *A. praestans* is an Anchitherium. That is, supposing Marsh's type of Miohippus possess the character referred to, which is unknown. The same character will refer Desmathippus to Anchitherium; and the other characters regarded by Prof. Scott as distinguishing the two, do not seem to the reviewer to be of sufficient value to forbid such reference.

The *Anchitherium crenidens* (as we would call it) presents especial interest in the strong crenation of the anterior border of the metaconule, offering the earliest example of this structure known, and pointing to the origin of the similar structure seen in later horses of several genera. In the *A. equinum* we have the American form nearest to the European *A. aurelianeuse*. The American (White River) *A. exoletum* Cope (not *A. cuneatum*, as stated by Scott) has superior molars of similar character.

In the Artiodactyla, the most important discovery is the presence of an ossified thyroid cartilage, and a probable rudimental clavicle in an Oreodontid, which but for these characters would be an Eporeodon. To this form Prof. Scott gives the name of Mesoreodon.

We expect thorough and intelligent work from Prof. Scott, and in this memoir we are not disappointed. It is by papers of this kind that our knowledge of the evolution of organic life is really advanced. The illustrations are every way worthy of the text.—E. D. Cope.

Von Ihring on the Fishes and Mammals of Rio Grande do Sul.[8]—These two brochures are valuable as bringing the subject of which they treat up to a later date than the papers of Hensel, who wrote in 1870–2–9. The species are not all described, and some of the notices embrace descriptions of habits, while the known distribution is given, with pretty full references to the literature. The species of

[8] Die Süsswasser Fische von Rio Grande do Sul; von Dr. H. von Ihring, 12mo, 36 pp.; Rio Grande, Jan. 1893.

Os Mammiferos do Rio Grande do Sol, pelo Dr. Herman von Ihring, 12mo, pp. 30; Rio Grande, Apl. 20, 1892.

fishes enumerated are chiefly those of the Atlantic streams. They are included in the following orders: Nematognathi, 23 sp.; Plectospondyli, 14 sp.; Holostomi, 1 sp.; Percomorphi, 8. A new Gobius is described. The Mammalia number 92 species, of which 11 are Marsupialia, 5 Edentata, 23 Glires, 16 Chiroptera, 20 Carnivora, 17 Diplarthra, 3 Quadrumana, and 2 Cetacea. An interesting feature is the number of species of Didelphyidae, of which a new species is described. The author includes without hesitation the *Felis braccata* Cope in the *F. jaguarondi*, probably because in the original description it is said to be allied to that species. As matter of fact, however, it is very little allied to that species, and has no close relationships to any other. It is remarkable for the large size and pointed outline of its ears, which are sharply bicolor on the upper surface. The mounted skin shows faint oblique bands on the sides. Its very obscure colors render it easy of concealment, which, perhaps, with its apparent rarity, accounts for its having so long escaped the observation of naturalists. Von Ihring also asserts the identity of the *Sphingurus sericeus* with the *S. villosus*. If the latter is, as generally asserted, identical with the *S. insidiosus*, the *S. sericeus* is distinct enough.—E. D. Cope.